

**REMARKS**

Entry of the foregoing, reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 116, are respectfully requested in light of the remarks which follow.

**I. Amendments to the Claims**

By the foregoing claim amendments, claims 1, 10, 13, 17, and 29 have been amended as discussed below.

The amendments to the claims have been made without prejudice or disclaimer to any subject matter recited or canceled herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments to the above-identified application are respectfully requested.

**II. Response to Objection to the Specification**

The specification has been objected to for allegedly including terms which are not clear, concise, and exact. Applicants respectfully traverse this objection.

Nonetheless, to expedite prosecution in the present application, Applicants submit herewith a substitute specification including "clarifying" amendments throughout the disclosure.

Applicants respectfully request reconsideration and withdrawal of the objections to the specification.

**III. Response to Objection to the Claims**

Claims 13 and 29 have been objected to for reciting achieving the peak intensity of the predetermined range.

The basis of the Examiner's objection is not clear to Applicants. However, Applicants note that claims 13 and 29 have been amended, and Applicants respectfully request reconsideration and withdrawal of this objection.

**IV. Response to Claim Rejections Under 35 U.S.C. § 112, First Paragraph**

**A.** Claims 1-30 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement.

**B.** Claim 17 has been rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Applicants respectfully traverse the rejections under 35 U.S.C. § 112, first paragraph.

With regard to claim 1, the Examiner has indicated in the Office Action that the control means is not enabled to process variables attributed by biological body. However, it is stated in the specification on page 17, lines 15 to 20, that "[t]he condition of light irradiation may preferably be determined depending on the size of the lesioned part, type of light used and PDT drugs. Relationship between the peak intensity of light and the therapeutic depth can be estimated easily by using the model mimicked to the tissue (e. g. the model prepared by using animal tissues)." Applicants submit that according to the description, it is clear that the control means controls parameters of the light based on a model acquired from a preliminary experiment and controls the therapeutic depth.

With regard to claim 17, the Examiner has indicated in the Office Action that means for measuring the cell death rate and providing same to a control means is not disclosed in the present specification. However, as shown in Fig. 7 and 9 of the present specification, the cell death rate in each pulse energy density is acquired from a preliminary experiment. It is not measured during treatment. To expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, claim 17 has been amended to recite the phrase "experimentally estimated relationship between rate of cell death and depth." Applicants submit that such amendment should clarify the claim.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

**V. Response to Claim Rejections Under 35 U.S.C. § 112, Second Paragraph**

Claims 1-30 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Applicants respectfully traverse this rejection.

The Examiner has indicated that terms such as "high peak intensity" and "low peak intensity" are indefinite. Applicants note that these terms are used to determine the two different peak intensities. Namely, it is just determined that light having higher peak intensity

is the light of high peak intensity; light having lower peak intensity is the light of low peak intensity. This is clear from the description in the specification and expression, "the irradiation means to irradiate the light having a low peak intensity lower than the high peak intensity." Applicants submit that the meaning of the terms would have been clear to a person of ordinary skill in the art.

With regard to claim 10, Applicants respectfully submit that, as clarified via the present amendments, the total number of the pulse is constant.

Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

#### **VI. Response to Claim Rejections Under 35 U.S.C. §§ 102 and 103**

**A.** Claims 1, 2, 4-6, 10-12, 17 and 22-25 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Parker et al. (U.S. Patent No. 4,592,361).

**B.** Claim 3 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Parker et al. as applied to claim 1 above and further in view of Prasad et al. (U.S. Publication No. 2003/0022105).

**C.** Claims 7-9 and 26-28 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Parker et al. as applied to claims 1 and 17 above and further in view of Selman (U.S. Patent No. 5,514,669).

**D.** Claims 13-16 and 29-30 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Parker et al. in view of Dumoulin-White (U.S. Patent No. 6,413,267) and Dougherty (U.S. Patent No. 5,145,863).

Applicants respectfully traverse the rejections under 35 U.S.C. §§ 102 and 103.

The Examiner has rejected the claims based on Parker (U.S. Patent No. 4,592,361).

However, in the present claims the photosensitive substance is activated in the deep-lying lesioned part while preserving the superficial part, wherein said control means controls the depth in the body, where the photosensitive substance is activated, in the position adjacent to the lesioned part by allowing the irradiation means to irradiate the light having the high peak intensity in order that the light arriving at the deep-lying lesioned part is to achieve the peak intensity of the predetermined range, and controls not to activate the photosensitive substance in the superficial part of the body positioned closer to the light irradiation means than the lesioned part of the body. The subject matter of the present claims is not taught or suggested in Parker et al.

In addition, to expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, the claims have been amended as set forth above. Specifically, the phrase "an input means for being input a preserved distance which is determined based on depth and size of a deep-lying lesioned part" has been added to claims 1, 13 and 29. The input means is supported in the specification, at least at page 28, lines 12 to 18 and lines 25 to 32 . According to the description, the existence of the input means is clear.

Moreover, claim 17 has been rejected over Parker. However, Parker does not teach or suggest calculating an irradiation condition of the light based on an experimentally estimated relationship between rate of cell death and depth in each pulse energy density.

Finally, the additional references cited by the Examiner do not remedy the serious deficiencies of Parker.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 102 and § 103 rejections.

## **VII. Conclusion**

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

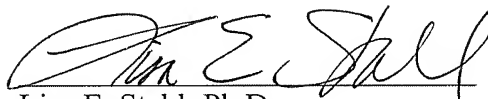
In the event that there are any questions relating to this Amendment and Reply or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney so that prosecution of this application may be expedited.

Respectfully submitted,

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